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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,287	10/16/2003	George W. Wagner	DAM 585-02	7537

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US ARMY SOLDIER AND BIOLOGICAL CHEMICAL COMMAND
OFFICE OF THE CHIEF COUNSEL/IP TEAM (BLDG E4435)
5183 BLACKHAWK ROAD
APG, MD 21010-5424

EXAMINER

PRICE, CRAIG JAMES

ART UNIT	PAPER NUMBER
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3753

DATE MAILED: 12/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/687,287

Applicant(s)

WAGNER, GEORGE W.

Examiner

Craig Price

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-12 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-10, and 12, are drawn to the system for storage and mixing of a solution, classified in class 137, subclass 266.
 - II. Claim 11 is drawn to a method for storage and mixing of a solution, classified in class 137, subclass 3.

Inventions of Group II and Group I are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the product as claimed can be used in a materially different process such as a device for bleaching fabrics. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

2. During a telephone conversation with applicant's attorney, Mr. John Biffoni, on December 2, 2005 a provisional election was made with traverse to prosecute the invention of a system for storage and mixing of a solution, claims 1-10, and 12. Affirmation of this election must be made by applicant in replying to this Office action. Claim 11 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

DETAILED ACTION

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claim limitation in; claim 8, "agitator", and claim 9, "quick-release couplings", must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1- 7,10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mohr (US 1,404,467) in view of Kleman (US 2,120,865).

Regarding claims 1-7,10 and 12, Mohr discloses a system for storage and mixing of a solution comprising a plurality of ingredients not compatible for long-term storage in a pre-mixed formulation comprising, a storage tank divided into a plurality of compartments, each compartment (6,7,8) adapted to isolate and store an ingredient, wherein the storage capacity of each compartment is proportionate to an amount of an ingredient in the mixed solution, a plurality of fluid conduits (11,12,13) for withdrawing and conveying ingredients from the compartments, wherein the fluid conduits comprise dip tubes (11,12,13) that extend down from an upper level of the compartments to a

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level near the bottom and include an aperture, a manifold (10,9,41,23,21,17) for mixing of the ingredients to which the fluid conduits are coupled, wherein the manifold is positioned above the level of the compartments, wherein the compartments comprise vents to provide pressure and/or vacuum relief (through the top opening of the compartments), a sump (1) coupled to an output aperture of the manifold for holding a quantity of the solution and comprising at least one discharge port, a plurality of control valves (14,15,16) disposed in the fluid conduits for regulating the flow of ingredients from the compartments to the manifold, wherein the manifold comprises a coil (23,21,17 are disposed in a single open loop of tubing around the bottom of the sump) disposed around the sump, a display device to enable monitoring of one or more system parameters, wherein the display device (58,59) comprises a means for monitoring a liquid level in a compartment, and a plurality of fill ports disposed in each compartments for loading ingredients (through the top opening of the compartments), as all shown in Figure 1.

Mohr lacks, a plurality of one-way valves disposed in the fluid conduits to prevent a back flow of the ingredients into the compartments.

Kleman teaches the use a plurality of one way valves (3) disposed in the fluid conduits to prevent a back flow of the ingredients into the compartments, as shown in Figure 5, and in (col. 4, Lns. 5-10).

In view of the Kleman patent, it would have been obvious to one of ordinary skill in the art at the time of invention to employ the check valve of Kleman into the fluid

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conduits of Mohr, in order to prevent the contamination of the original ingredients in the compartments.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mohr (US 1,404,467) and Kleman (US 2,120,865) and further in view of Hicks (US 2,692,798).

Mohr and Kleman have taught all features of the claimed invention, although lack that, an agitator is disposed in a compartment to provide for mixing of an ingredient.

Hicks teaches the use of an agitator is disposed in a compartment to provide for mixing of an ingredient as shown in Figure1 and in (col. 1, Lns, 1-10).

In view of the Hicks patent, it would have been obvious to one of ordinary skill in the art at the time of invention to employ the agitator of Hicks, into the compartments of Mohr, in order to provide a uniform mixture of the ingredients (col. 1,Lns. 6-10).

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mohr (US 1,404,467) and Kleman (US 2,120,865) and further in view of Laabs et al. (US 5,868,320).

Mohr and Kleman have taught all features of the claimed invention, although lack that the discharge port comprises one or more quick-release couplings for attaching conduits to withdraw the solution.

Laabs et al. teaches the use of a discharge port comprises one or more quick-release couplings for attaching conduits to withdraw the solution, in Figure 4 and in (col. 5,Lns. 5-13).

In view of the Laabs et. al. patent, it would have been obvious to one of ordinary skill in the art at the time of invention to employ the quick-release couplings of Laabs et.

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al. onto the outlet of sump of Mohr, in order to provide a discharge port with a quick-release connection method for attaching the conduit in a manner that is expeditious and easy to use.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Perlewitz (2,935,057), Neubert et. al. (719,846), Tepper (3,543,787), Dyer (3,119,527), Setzer (900,599) and Jones (932,284) all show similar mixing systems.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig Price whose telephone number is (571) 272-2712. The examiner can normally be reached on 8AM - 5PM M-F.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Blau can be reached on (571) 272-4406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CP



November 30, 2005



STEPHEN BLAU
PRIMARY EXAMINER